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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/629,863

07/30/2003

Yu-Chun Peng

0941-0800P

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2292

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10/17/2006

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EXAMINER

PENDLETON, BRIAN T

ART UNIT

PAPER NUMBER

2615

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/629,863	PENG ET AL.	
	Examiner	Art Unit	
	Brian T. Pendleton	2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-9 is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Scarlett et al, US Patent 6,856,046. Scarlett discloses a plug detection device comprising jack J1, first pin 14, second pin 10, and discrimination circuit 32. The discrimination circuit 32 determines the type of device plugged into the jack J1 from among a stereo headphone 26 with two speakers, telephone headset 28 that has two speakers and a microphone, and phone headset 30 with a single speaker and a microphone. As disclosed in column 4 line 35 – column 6 line 20, the resistance between pins 14 and 10 and a common contact 22 determine the type of device plugged in. The first and second detection circuits are comparators CMP1 and CMP2 (see figure 3) which are electrically coupled to the first and second pins and compare voltages V6 and V7 to output first and second logic potentials CMP1OUT and CMP2OUT which detect the presence of a microphone function. Claim 1 is rejected.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett et al. Scarlett et al discloses that logic potential CMP3OUT is low when no plug is connected to the earphone jack but does not disclose that the first and second potentials CMP1OUT and COMP2OUT are low when no plug is connected to the earphone jack. However, it would have been obvious to one of ordinary skill that the circuitry in Scarlett et al could be modified to provide CMP1OUT and CMP2OUT with low potentials when no plug is connected as that configuration provided no unexpected results over the present configuration. Regarding claims 3 and 4, the same reasoning as claim 2 applies – the choice of the values of the logic potentials for a particular device being plugged in was one of obvious design to an artisan.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Scarlett et al in view of Lim, US Patent 6,922,572. Scarlett et al do not disclose that the jack has a third pin wherein the third pin is coupled to the grounded conductive ring when the plug is connected to the earphone jack. Lim discloses a 4 pole earphone which has a jack having a third pin 1 which is coupled to the grounded conductive ring of the plug. It would have been obvious to one of ordinary skill in the art at the time of invention to modify Scarlett to have a third pin in jack J1 for the purpose of accommodating a four pole earphone.

Allowable Subject Matter

Claims 6-9 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: Scarlett does not disclose the a first capacitor and second capacitor specifically arranged with the

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six resistors and switched, as claimed in independent claim 6. As a result, claim 6 and its dependents, claims 7-9 are allowed.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Aotake et al, US Patent 6,819,942; Mizukami et al, US Patent 6,069,960; Kim et al, US Patent 6,397,087.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Pendleton whose telephone number is (571) 272-7527. The examiner can normally be reached on M-F 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

btm

Brian T. Pendleton
Primary Examiner
Art Unit 2615

B. T. Pendleton